PTO/SB/33 (07-05)
United States Patent & Trademark Office; U.S. DEPARTMENT OF COMMERCE

PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) 059559.00029
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on _____ Signature _____ Typed or printed Name _____	Application Number: 10/572,758 Filed: March 21, 2006 First Named Inventor: Yukkiang LAU Art Unit: 1791 Examiner: Heitbrink, Jill Lynne

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ Applicant/Inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed

☒ Attorney or agent of record.
Registration No. 52,738

☐ Attorney or agent acting under 37 CFR 1.34.
Reg. No. is acting under 37 CFR 1.34 _____

Signature

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Typed or printed name

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Telephone number

July 11, 2008
Date

NOTE: Signatures of all of the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Yukkiang LAU, *et al.*
Application No.: 10/572,758
Filed: March 21, 2006

Art Unit: 1791
Examiner: Heitbrink, Jill Lynne
Attorney Dkt. No.: 059559.00029

For: INJECTION MOLDING MACHINE AND METHOD

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 11, 2008

Sir:

In accordance with the Pre-Appeal Brief Conference Pilot Program guidelines set forth in the July 12, 2005, Official Gazette Notice, Applicants hereby submit this Pre-Appeal Brief Request for Review ("PABRR") of the final rejections of claims 1-8 in the above identified application. Claims 1-8 were finally rejected in the Final Office Action dated March 14, 2008 ("Office Action"). Applicants filed a Response to the Final Office Action on June 6, 2008 ("Applicants' Response"), amending claim 1 to correct a minor informality, and the Office issued an Advisory Action dated June 20, 2008 ("Advisory Action"), maintaining the final rejections of claims 1-8. In the Advisory Action, the Office indicated that the amendment to claim 1 submitted in Applicants' Response would not be entered for purposes of appeal. Applicants hereby appeal these rejections and submit this PABRR. A Notice of Appeal is filed timely concurrently herewith.

Applicants respectfully submit that the cited references fail to disclose or suggest every feature recited in claims 1-8, thereby rendering the rejections clearly erroneous. Applicants' Response presented arguments demonstrating the Office Action's failure to demonstrate that Bulgrin and Hehl, alone or in combination, disclose or suggest every feature recited in claims 1-8. Therefore, Applicants respectfully request reconsideration of the arguments presented in

Applicants' Response and submitted herewith, and respectfully submit that claims 1-8 are in condition for allowance.

Claims 1 and 3-8 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Bulgrin (U.S. Patent No. 5,456,870) ("Bulgrin"). Claim 2 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Bulgrin, as applied to claim 1, and further in view of either Hehl (U.S. Patent No. 5,159,957) ("Hehl") or JP 61-234120 ("JP '120"). Applicants respectfully submit that the aforementioned claim rejections are in clear error; and therefore, respectfully request withdrawal of the claim rejections for at least the reasons discussed below.

Bulgrin is directed to an improved temperature control system using a state controller with two degrees of freedom to regulate the temperature of the barrel of an injection molding machine (Bulgrin, Abstract; col. 3, line 59, to col. 7, line 6).

Applicants respectfully submit that the rejections of claims 1 and 3-8 under 35 U.S.C. §102(b) based on the teachings of Bulgrin are in clear error because Bulgrin fails to disclose or suggest, at least, "a recording device which stores a recorded target temperature distribution range indicating an optimal temperature range at each position of the cylinder member; and a control section for adjusting set temperatures of the heaters such that each of the temperatures detected by the temperature detection sections falls within the target temperature distribution range" as recited in claim 1, and similarly recited in claim 6 (emphasis added).

The Office Action alleged that Bulgrin discloses the aforementioned claim features, citing column 8, line 59, to column 9, line 12, and column 20, lines 18-54 (See Office Action on page 2). In the *Response to Arguments,* the Office Action further alleged that Bulgrin includes a console screen 28 which is connected to the programmable controller. The Office Action further alleged that Figures 1 and 2 clearly show the set point temperatures shown on the console screen. The Office Action concluded that a recording device would have been inherent in the program controller since these set point temperatures are shown with the thermocouple temperatures to show the operating conditions (Office Action on page 3). Furthermore, the Advisory Action alleged that Bulgrin discloses recording devices at column 5, lines 10-17, column 9, lines 33-37 and 42-46, column 14, lines 15-19, and column 17, lines 44-52. The Advisory Action concluded that these recording devices would have inherently recorded the optimal temperature range at

each position. Citing column 19, lines 31-35, the Advisory Action further alleged that the Bulgrin controller adjusts the heat input required for the heater bands which is for adjusting the set temperature of the heaters such that the temperatures detected by the temperature detection sections fall within the target temperature range (Advisory Action on page 2). However, a review of these passages and Figures 1 and 2 demonstrates that Bulgrin fails to disclose or suggest every feature recited in claim 1, and similarly recited in claim 6.

Rather, Bulgrin discloses cylindrical barrel 12 including four heater bands 20a, 20b, 20c, and 20d and four thermocouples 26a, 26b, 26c and 26d. Heater bands 20a-20d and thermocouples 26a-26d are positioned at the rear, center, front, and nozzle areas of cylindrical barrel 12. Bulgrin further discloses operator console screen 28 capable of *displaying* a variety of machine operated pictures or views, one of which, as illustrated in FIGS. 1 and 2, controls heater bands 20a-20d and visually shows the *present temperature* sensed by thermocouples 26a-d. The operator thus dials in a desired temperature, *a set point signal temperature for each heat band 20a-20d*, as shown schematically in the drawings by reference numerals 29a-29d for the set point temperatures, respectively, for the rear, center, front, and nozzle portions of barrel wall 25. Because operator console screen 28 typically displays the present temperature of each thermocouple 26a-26d, the operator has a visual check of the barrel temperature where he can see a thermal run away, breakdown, etc. (Bulgrin, col. 8, line 59, to col. 9, line 12).

Hence, Bulgrin merely discloses that both the present temperature sensed by each thermocouple 26a-26d and each individual set point temperature 29a-29d are *displayed* on the operator console screen 28, i.e. only a *single* temperature reading at each location is read and displayed on the operator console screen 28. Bulgrin fails to disclose or suggest that to *display* either the present temperature sensed by each thermocouple 26a-d, or each individual set point temperature 29a-29d further requires *storing* "a recorded target temperature distribution range indicating an optimal temperature range at each position of the cylinder member" in a recording device, as recited in claim 1, and similarly recited in claim 6 (emphasis added). In other words, although the Bulgrin program controller may be capable of *displaying* the aforementioned temperature readings/settings on the operator console screen 28, one of ordinary skill in the art would not have concluded that it would have also been inherently required for the program

controller to further include a distinct structural element, e.g. a recording device, which "stores a recorded target temperature distribution range indicating an optimal temperature range at each position of the cylinder member" (emphasis added).

Even if the present temperature sensed by each thermocouple 26a-26d or each set point temperature 29a-29d were stored for display on the operator console screen 28, Bulgrin would fail to disclose or suggest, at least, a distinct "recording device which stores a recorded target temperature distribution range indicating an optimal temperature range at each position of the cylinder member" as recited in claim 1, and similarly recited in claim 6 (emphasis added). Rather, only a *single* present temperature sensed at each respective thermocouple 26a-26d, or a single set point temperature 29a-29d for a respective heat band 20a-20d is read and displayed on the operator console screen 28 (Bulgrin, col. 19, lines 31-35 – the signal generated is the energy or heat input required from heater bands 20 to produce the desired *set point temperature*, not a set point *temperature range*).

Accordingly, since Bulgrin fails to disclose the storing of the targeted temperature distribution range, Applicants respectfully submit that Bulgrin also fails to disclose or suggest, at least, "a control section for adjusting set temperatures of the heaters such that each of the temperatures detected by the temperature detection sections falls within the target temperature distribution range" as recited in claims 1 and 6 (emphasis added).

Accordingly, Bulgrin fails to disclose or suggest every feature recited in claim 1, and similarly recited in claim 6. Hehl and JP '120 fails to cure the deficiencies of Bulgrin previously discussed. Specifically, Hehl and JP '120 each fails to disclose or suggest, at least, "a recording device which stores a recorded target temperature distribution range indicating an optimal temperature range at each position of the cylinder member; and a control section for adjusting set temperatures of the heaters such that each of the temperatures detected by the temperature detection sections falls within the target temperature distribution range" as recited in claims 1, and similarly recited in claim 6.

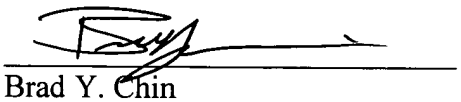
Claims 2-5 depend from claim 1. Claims 7-8 depend from claim 6. Accordingly, claims 2-5 and 7-8 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Accordingly, the Final Office Action's rejections of claims 1-8 under 35 U.S.C. §102(b) and §103(a) based on the teachings of Bulgrin, Hehl, and JP '120 are in clear error for at least the reasons discussed above. Therefore, claims 1 and 6, and the claims that depend therefrom, should be in condition for allowance. Accordingly, these rejections should be summarily reversed.

Furthermore, Applicants respectfully submit that the Office's refusal to enter the amendments to claim 1 proposed in Applicants' Response is in clear error. The Advisory Action indicated that the amendments to claim 1 were not entered because they were not deemed by the Office to place the application in better form for appeal by materially reducing or simplifying the issues for appeal. Applicants respectfully disagree. Applicants respectfully submit that replacing "for adjusting" with "which adjusts" for the "control section" mirrors the form of the claim recitation for the "recording device which stores" recited in claim 1, removing any ambiguity of a means-plus-function recitation; and therefore, simplifying the issues for appeal.

Reconsideration and withdrawal of the rejections, in view of the clear errors in the Office Action, is respectfully requested. In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: PTO/SB/33 Form; Notice of Appeal; Petition for Extension of Time; Check No. 019224